

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 5/14/2018 Revision date: 7/18/2023 Supersedes version of: 2/27/2023 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Mixture
Trade name	: CARAMEL #EU11062F
UFI	: KRMY-201R-T00W-7A6K
Product code	: EU11062F
Type of product	: Perfumes, fragrances
Product group	: Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Industrial/Professional use spec	: For professional use only
	Industrial
Use of the substance/mixture	: Perfumes, fragrances
Function or use category	: Odour agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

FRENCH COLOR & FRAGRANCE International GmbH Mittlerer Weg 35 DE– 79424 Auggen Germany T 49-7631-931-8900 SDS@frenchcolor.com - www.frenchcolor.com

1.4. Emergency telephone number

Emergency number

: 1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731; Brazil: +0-800-591-6042; India: +000-800-100-4086

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Acute toxicity (oral), Category 4	H302
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. Causes serious eye irritation. Toxic to aquatic life with long lasting effects. May cause an allergic skin reaction.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) : GHS07 GHS09 Signal word (CLP) : Warning

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Hazard statements (CLP)	: H302 - Harmful if swallowed.
	H317 - May cause an allergic skin reaction.
	H319 - Causes serious eye irritation.
	H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264 - Wash hands, forearms and face thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P272 - Contaminated work clothing should not be allowed out of the workplace.
	P273 - Avoid release to the environment.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing
	protection.
Extra phrases	: For professional users only.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371- 33	61.79 – 81.79	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Ethyl vanillin	CAS-No.: 121-32-4 EC-No.: 204-464-7 REACH-no: 01-211958961-24	5.45 – 8.45	Eye Irrit. 2, H319
Methyl ester of rosin (partially hydrogenated)	CAS-No.: 8050-15-5 EC-No.: 232-476-2	1.1 – 3.1	Aquatic Chronic 3, H412
Vanillin	CAS-No.: 121-33-5 EC-No.: 204-465-2 REACH-no: 01-2119516040- 60	1 – 2.5	Eye Irrit. 2, H319
COUMARIN	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756- 26	0.85 – 1.2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Heliotropine	CAS-No.: 120-57-0 EC-No.: 204-409-7 REACH-no: 01-2119983608- 21	0.6 – 0.9	Skin Sens. 1B, H317

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
acetyl propionyl substance with national workplace exposure limit(s) (DE, SI, CH)	CAS-No.: 600-14-6 EC-No.: 209-984-8	0.5 – 0.8	Flam. Liq. 2, H225 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373
1,2-Cyclopentanedione, 3-methyl-	CAS-No.: 765-70-8 EC-No.: 212-154-8	0.15 – 0.45	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317
Isobutyl acetate substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH)	CAS-No.: 110-19-0 EC-No.: 203-745-1 EC Index-No.: 607-026-00-7	0.1 – 0.2	Flam. Liq. 2, H225 STOT SE 3, H336

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: Call a poison center or a doctor if you feel unwell.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.	
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after skin contact Symptoms/effects after eye contact	May cause an allergic skin reaction.Eye irritation.	

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

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6.1.2. For emergency responders Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment.		
6.3. Methods and material for containment	and cleaning up	
For containment Methods for cleaning up Other information	 Collect spillage. Take up liquid spill into absorbent material. Dispose of materials or solid residues at an authorized site. 	
6.4. Reference to other sections		
For further information refer to section 13.		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage,	including any incompatibilities
Storage conditions Storage temperature	: Store in a well-ventilated place. Keep cool. : 25 °C

Storage conditions	: Store in a well-ventilated place. Keep cool.
Storage temperature	: 25 °C
Storage area	: Store in a well-ventilated place. Store away from heat.
Special rules on packaging	: Store in a closed container.
Packaging materials	: Do not store in corrodable metal.
Special rules on packaging	: Store in a closed container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

acetyl propionyl (600-14-6)		
Germany - Occupational Exposure Limits (TRGS 900)		
AGW (OEL TWA) [1]	0.083 mg/m³	
AGW (OEL TWA) [2]	0.02 ppm	
Chemical category	Skin notation, Skin sensitization	
Slovenia - Occupational Exposure Limits		
OEL TWA	0.083 mg/m³	
OEL TWA [ppm]	0.02 ppm	
OEL STEL	0.083 mg/m³	
OEL STEL [ppm]	0.02 ppm	
OEL chemical category	Potential for cutaneous absorption	

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acetyl propionyl (600-14-6)			
Switzerland - Occupational Exposure Limits			
MAK (OEL TWA) [1]	0.08 mg/m³		
MAK (OEL TWA) [2]	0.02 ppm		
KZGW (OEL STEL)	0.16 mg/m ³		
KZGW (OEL STEL) [ppm]	0.04 ppm		
OEL chemical category	Sensitizer, Skin notation		
Isobutyl acetate (110-19-0)	<u>.</u>		
Austria - Occupational Exposure Limits			
MAK (OEL TWA)	241 mg/m³ (Butyl acetates)		
MAK (OEL TWA) [ppm]	50 ppm (Butyl acetates)		
MAK (OEL STEL)	480 mg/m³ (Butyl acetate)		
MAK (OEL STEL) [ppm]	100 ppm (Butyl acetate)		
Belgium - Occupational Exposure Limits			
OEL TWA	238 mg/m³		
OEL TWA [ppm]	50 ppm		
OEL STEL	712 mg/m³		
OEL STEL [ppm]	150 ppm		
Bulgaria - Occupational Exposure Limits	Bulgaria - Occupational Exposure Limits		
OEL TWA	241 mg/m ³		
OEL TWA [ppm]	50 ppm		
OEL STEL	723 mg/m³		
OEL STEL [ppm]	150 ppm		
Croatia - Occupational Exposure Limits			
GVI (OEL TWA) [1]	241 mg/m³		
GVI (OEL TWA) [2]	50 ppm		
KGVI (OEL STEL)	723 mg/m³		
KGVI (OEL STEL) [ppm]	150 ppm		
Cyprus - Occupational Exposure Limits			
OEL TWA	241 mg/m³		
OEL TWA [ppm]	50 ppm		
OEL STEL	723 mg/m³		
OEL STEL [ppm]	150 ppm		
Czech Republic - Occupational Exposure Limits			
PEL (OEL TWA)	241 mg/m ³		
Denmark - Occupational Exposure Limits			
OEL TWA [1]	241 mg/m³ (Butyl acetate, all isomers)		
OEL TWA [2]	50 ppm (Butyl acetate, all isomers)		
OEL STEL	723 mg/m³		
OEL STEL [ppm]	150 ppm		

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Isobutyl acetate (110-19-0)		
Estonia - Occupational Exposure Limits		
OEL TWA	241 mg/m ³	
OEL TWA [ppm]	50 ppm	
OEL STEL	723 mg/m ³	
OEL STEL [ppm]	150 ppm	
Finland - Occupational Exposure Limits		
HTP (OEL TWA) [1]	240 mg/m ³ (Butyl acetate)	
HTP (OEL TWA) [2]	50 ppm (Butyl acetate)	
HTP (OEL STEL)	725 mg/m ³ (Butyl acetate)	
HTP (OEL STEL) [ppm]	150 ppm (Butyl acetate)	
France - Occupational Exposure Limits	·	
VME (OEL TWA)	241 mg/m ³ (restrictive limit)	
VME (OEL TWA) [ppm]	50 ppm (restrictive limit)	
VLE (OEL C/STEL)	723 mg/m ³ (restrictive limit)	
VLE (OEL C/STEL) [ppm]	150 ppm (restrictive limit)	
Germany - Occupational Exposure Limits (TRGS 900)		
AGW (OEL TWA) [1]	300 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
AGW (OEL TWA) [2]	62 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
Greece - Occupational Exposure Limits		
OEL TWA	241 mg/m ³	
OEL TWA [ppm]	50 ppm	
OEL STEL	723 mg/m ³	
OEL STEL [ppm]	150 ppm	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	241 mg/m ³	
CK (OEL STEL)	723 mg/m ³	
OEL chemical category	Sensitizer	
Ireland - Occupational Exposure Limits		
OEL TWA [1]	241 mg/m ³	
OEL TWA [2]	50 ppm	
OEL STEL	723 mg/m³ (calculated)	
OEL STEL [ppm]	150 ppm (calculated)	
Italy - Occupational Exposure Limits	·	
OEL TWA	241 mg/m ³	
OEL TWA [ppm]	50 ppm	
OEL STEL	723 mg/m³	
OEL STEL [ppm]	150 ppm	

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Isobutyl acetate (110-19-0)		
Latvia - Occupational Exposure Limits		
OEL TWA	241 mg/m ³	
OEL TWA [ppm]	50 ppm	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	241 mg/m ³	
IPRV (OEL TWA) [ppm]	50 ppm	
TPRV (OEL STEL)	723 mg/m³	
TPRV (OEL STEL) [ppm]	150 ppm	
Luxembourg - Occupational Exposure Limits		
OEL TWA	241 mg/m ³	
OEL TWA [ppm]	50 ppm	
OEL STEL	723 mg/m³	
OEL STEL [ppm]	150 ppm	
Malta - Occupational Exposure Limits		
OEL TWA	241 mg/m ³	
OEL TWA [ppm]	50 ppm	
OEL STEL	723 mg/m³	
OEL STEL [ppm]	150 ppm	
Netherlands - Occupational Exposure Limits		
TGG-8u (OEL TWA)	241 mg/m ³	
TGG-8u (OEL TWA) [ppm]	50 ppm	
TGG-15min (OEL STEL)	723 mg/m³	
TGG-15min (OEL STEL) [ppm]	150 ppm	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	240 mg/m ³	
NDSCh (OEL STEL)	720 mg/m³	
Portugal - Occupational Exposure Limits		
OEL TWA	241 mg/m³ (indicative limit value)	
OEL TWA [ppm]	50 ppm (indicative limit value)	
OEL STEL	723 mg/m³ (indicative limit value)	
OEL STEL [ppm]	150 ppm (indicative limit value)	
Romania - Occupational Exposure Limits		
OEL TWA	715 mg/m ³	
OEL TWA [ppm]	150 ppm	
OEL STEL	950 mg/m³	
OEL STEL [ppm]	200 ppm	
Slovakia - Occupational Exposure Limits		
NPHV (OEL TWA) [1]	480 mg/m³	
NPHV (OEL TWA) [2]	100 ppm	

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Isobutyl acetate (110-19-0)		
NPHV (OEL C)	700 mg/m ³	
Slovenia - Occupational Exposure Limits		
OEL TWA	241 mg/m ³	
OEL TWA [ppm]	50 ppm	
OEL STEL	723 mg/m³	
OEL STEL [ppm]	150 ppm	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	241 mg/m ³	
VLA-ED (OEL TWA) [2]	50 ppm	
VLA-EC (OEL STEL)	723 mg/m³	
VLA-EC (OEL STEL) [ppm]	150 ppm	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	241 mg/m³ (Butyl acetates)	
NGV (OEL TWA) [ppm]	50 ppm (Butyl acetates)	
KTV (OEL STEL)	723 mg/m³ (Butyl acetates)	
KTV (OEL STEL) [ppm]	150 ppm (Butyl acetates)	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	724 mg/m ³	
WEL TWA (OEL TWA) [2]	150 ppm	
WEL STEL (OEL STEL)	903 mg/m³	
WEL STEL (OEL STEL) [ppm]	187 ppm	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA) [1]	241 mg/m³	
Grenseverdi (OEL TWA) [2]	50 ppm	
Korttidsverdi (OEL STEL)	723 mg/m³ (value from the regulation)	
Korttidsverdi (OEL STEL) [ppm]	150 ppm (value from the regulation)	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA) [1]	240 mg/m³	
MAK (OEL TWA) [2]	50 ppm	
KZGW (OEL STEL)	720 mg/m ³	
KZGW (OEL STEL) [ppm]	150 ppm	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	50 ppm (Butyl acetates, all isomers)	
ACGIH OEL STEL [ppm]	150 ppm (Butyl acetates, all isomers)	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Colour	: Liquid : light yellow. amber. Conforms to standard.
Odour	: characteristic. characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 93.33 °C (closed cup) ASTM D7094
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available

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Vapour pressure at 50°C Density		Not available Not available
Relative density	:	≈ 1.07
Relative vapour density at 20°C Particle characteristics		Not available Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008		
Acute toxicity (dermal) :	Harmful if swallowed. Not classified Not classified	
CARAMEL #EU11062F		
ATE CLP (oral)	569.541 mg/kg bodyweight	
acetyl propionyl (600-14-6)		
LD50 oral rat	3 g/kg	
LD50 oral	3000 mg/kg bodyweight	
LD50 dermal rabbit	> 2000 mg/kg	
LD50 dermal	2500 mg/kg bodyweight	
Benzyl benzoate (120-51-4)		
LD50 oral rat	500 mg/kg	
LD50 oral	1160 mg/kg bodyweight	
LD50 dermal rabbit	4000 mg/kg	

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Isobutyl acetate (110-19-0)	
LD50 oral rat	15400 mg/kg
LD50 dermal rabbit	> 17400 mg/kg
1,2-Cyclopentanedione, 3-methyl- (765-70-8)	
LD50 oral	1067 mg/kg bodyweight
Heliotropine (120-57-0)	
LD50 oral rat	2700 mg/kg
LD50 oral	2700 mg/kg bodyweight
LD50 dermal rat	> 5000 mg/kg
COUMARIN (91-64-5)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	290 mg/kg bodyweight
LD50 dermal rat	293 mg/kg
Ethyl vanillin (121-32-4)	
LD50 oral rat	1590 mg/kg
LD50 oral	3000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
Methyl ester of rosin (partially hydrogenated)	(8050-15-5)
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg
Vanillin (121-33-5)	
LD50 dermal rabbit	> 5010 mg/kg
LD50 dermal	2600 mg/kg bodyweight
	Not classified
	Causes serious eye irritation. May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
	Not classified
COUMARIN (91-64-5)	
IARC group	3 - Not classifiable
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
Isobutyl acetate (110-19-0)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure :	Not classified
acetyl propionyl (600-14-6)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard :	Not classified
Benzyl benzoate (120-51-4)	
Viscosity, kinematic	7.456 mm²/s

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Heliotropine (120-57-0)	
Viscosity, kinematic	Not applicable
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Hazardous to the aquatic environment, short-term : (acute)	Toxic to aquatic life with long lasting effects. Not classified Toxic to aquatic life with long lasting effects.
Benzyl benzoate (120-51-4)	
LC50 - Fish [1]	2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
NOEC (chronic)	0.168 mg/l
Isobutyl acetate (110-19-0)	
LC50 - Fish [1]	17 mg/l (Exposure time: 96 h - Species: Oryzias latipes)
Heliotropine (120-57-0)	
LC50 - Fish [1]	2.5 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])
Ethyl vanillin (121-32-4)	
LC50 - Fish [1]	81.4 – 94.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
Vanillin (121-33-5)	
LC50 - Fish [1]	53 – 61.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
NOEC (acute)	10000 mg/kg (Exposure time: 42 Days - Species: Eisenia foetida [soil dry weight])
12.2. Persistence and degradability	
Benzyl benzoate (120-51-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.
12.3. Bioaccumulative potential	
Benzyl benzoate (120-51-4)	
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)
Bioaccumulative potential	Not established.
Isobutyl acetate (110-19-0)	
BCF - Fish [1]	(no significant bioconcentration)
Partition coefficient n-octanol/water (Log Pow)	2.3 (at 25 °C (at pH 7)
Heliotropine (120-57-0)	
Partition coefficient n-octanol/water (Log Pow)	1.2 (at 35 °C)

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Ethyl vanillin (121-32-4)		
Partition coefficient n-octanol/water (Log Pow)	1.61 (at 25 °C)	
Methyl ester of rosin (partially hydrogenated) (8050-15-5)		
Partition coefficient n-octanol/water (Log Pow)	6.4 – 7.6 (at pH 6)	
Vanillin (121-33-5)		
Partition coefficient n-octanol/water (Log Pow)	1.23 (at 22 °C)	
12.4. Mobility in soil		

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal consider	ations
13.1. Waste treatment methods	
Waste treatment methods HP Code	 Dispose of contents/container in accordance with licensed collector's sorting instructions. HP3 - "Flammable:" flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and < 75 °C; flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber			
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.2. UN proper shippin	g name			·
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate)	Environmentally hazardous substance, liquid, n.o.s. (Benzyl Benzoate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate)
Transport document descr	iption			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Benzyl Benzoate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzyl Benzoate), 9, III
14.3. Transport hazard o	class(es)			
9	9	9	9	9
14.4. Packing group				
III	Ш	Ш	Ш	Ш
14.5. Environmental haz	ards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary informatio	n available	1		1

14.6. Special precautions for user

Overland transport		
Classification code (ADR)	:	M6
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	51
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01,
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions	:	TP1, TP29
(ADR)		
Tank code (ADR)	:	LGBV
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Loading, unloading	:	CV13
and handling (ADR)		
Hazard identification number (Kemler No.)	:	90
Orange plates	:	00
		90
		2002
		3082
Tunnel restriction code (ADR)	:	-
EAC code	:	•3Z

R001

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Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Special packing provisions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Air transport	 274, 335, 969 5 L E1 LP01, P001 PP1 IBC03 T4 TP1, TP29 F-A S-F A
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provisions (IATA) ERG code (IATA)	 E1 Y964 30kgG 964 450L 964 450L 450L A97, A158, A197, A215 9L
Inland waterway transport Classification code (ADN) Special provisions (ADN) Limited quantities (ADN) Excepted quantities (ADN) Carriage permitted (ADN) Equipment required (ADN) Number of blue cones/lights (ADN)	 M6 274, 335, 375, 601 5 L E1 T PP 0
Rail transportClassification code (RID)Special provisions (RID)Limited quantities (RID)Excepted quantities (RID)Packing instructions (RID)Special packing provisions (RID)Mixed packing provisions (RID)Portable tank and bulk container instructions (RID)Portable tank and bulk container special provisions(RID)Tank codes for RID tanks (RID)Transport category (RID)Ownide termination of the provisionsOwnide termination of the provisions	 M6 274, 335, 375, 601 5L E1 P001, IBC03, LP01, R001 PP1 MP19 T4 TP1, TP29 LGBV 3
Special provisions for carriage – Packages (RID) Special provisions for carriage - Loading, unloading and handling (RID) Colis express (express parcels) (RID) Hazard identification number (RID)	: W12 : CW13, CW31 : CE8 : 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REA	EU restriction list (REACH Annex XVII)				
Reference code	Applicable on	y title or description			
3(a)	acetyl propionyl ; Isobutyl acetate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F			
3(b)	CARAMEL #EU11062F ; acetyl propionyl ; Benzyl benzoate ; Isobutyl acetate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10			
3(c)	CARAMEL #EU11062F ; Benzyl benzoate ; Methyl ester of rosin (partially hydrogenated)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1			
40.	acetyl propionyl ; Isobutyl acetate	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.			

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

1	Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
F	Piperonal		120-57-0	2932 93 00	Category 1		Annex I

15.1.2. National regulations

Germany

Water hazard class (WGK)
Hazardous Incident Ordinance (12. BImSchV)

WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).
 Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

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Netherlands	
ABM category	: A(1) - highly toxic for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen	: Resin acids and Rosin acids, hydrogenated, methyl esters is listed
SZW-lijst van mutagene stoffen	: Resin acids and Rosin acids, hydrogenated, methyl esters is listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: None of the components are listed
Denmark	
Classification remarks	: Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:		
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H301	Toxic if swallowed.	
H302	Harmful if swallowed.	
H311	Toxic in contact with skin.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H336	May cause drowsiness or dizziness.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Sens. 1	Skin sensitisation, Category 1	

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Full text of H- and EUH-statements:	
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.